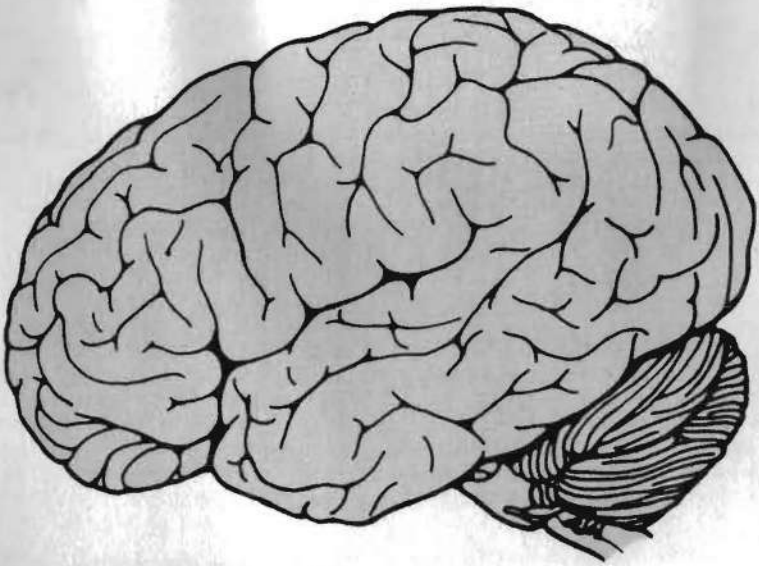
CALIFORNIA CHIROPRACTIC COLLEGES

LOS ANGELES COLLEGE OF CHIROPRACTIC

# The Chirogram

THE CHIROPRACTIC PHYSICIAN MAY 1975, VOL. 42, NO. 5

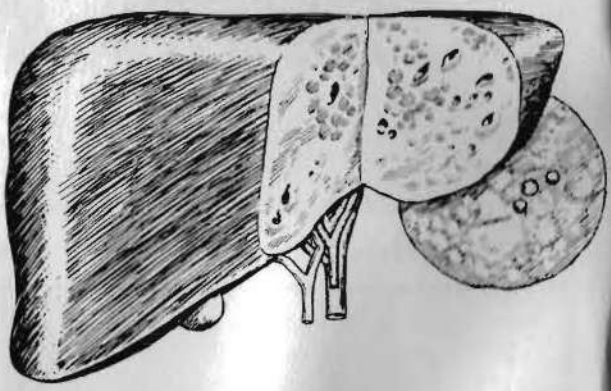


in this issue

## CRANIAL NERVE TESTING

# THE LIVER

## Filter... Storage Area... and Chemical Laboratory



Of all the organs of the body, none is more important nor more complex than the liver.

All the nourishment absorbed from the gastro-intestinal tract, into the blood, comes in contact with the cells of the liver. Here particulate matter is removed; sugar is stored in the form of glycogen; glucose can be manufactured from fat and protein; vitamins A, D, E, K, and B-12 are stored; bile is manufactured and excreted to aid in the digestive process; and other important physical and biochemical processes are initiated or carried on by its cells.

Almost every body function is, directly or indirectly, related to or dependent on the many and varied activities of the liver. Its importance to good health is, thus, evident.

One of the most important roles of the liver is in the conversion of neutral fats to phospholipids and their transport from the liver to points of utilization or to "fat depots" for future use. To convert neutral fats, brought to the liver, into phospholipids requires the presence of an adequate amount of Lipotropic Factors such as Choline, Betaine, Inositol and Lecithin.

When there is a deficiency of Lipotropic Factors, fat accumulates in the liver, crowding or replacing normal liver cells. This interferes with normal liver function. Fatty infiltration of the liver may make itself manifest in many different ways that are detrimental to health and life.

Fortunately, liver damage and its sequalae due to a deficiency of lipotropic factors may be prevented or corrected by supplying an adequate intake of these important nutritional materials. LIPOTRATE® provides a total of 2,035 mg. of Lipotropic Factors as Choline bitartrate, Inositol, Betaine hydrochloride and Lecithin with Niacinamide, Vitamin B-12, Vitamin B-6, d-Calcium Pantothenate, Iodine, Calcium, Phosphorus and DARTRATE® Concentrate in the suggested daily dosage.

# 1975
# LICENSE RENEWAL SEMINAR CALENDAR

Approved by the California Board of Examiners

Times: Saturdays & Wednesdays 1:00 - 9:00 PM
Thursdays & Sundays 9 AM - 4 PM

**AT LACC GLENDALE**

Fees: Preregistration $35
At the door $40

DATES

| | | |
|---|---|---|
| Sat-Sun. | August | 16-17 |
| Sat-Sun. | September | 20-21 |
| *Wed-Thu. | October | 15-16 |
| | Elks Club - Glendale | |
| Sat-Sun. | December | 13-14 |

**OFF CAMPUS: HOTELS**

Fees: Preregistration $40
At the door $50

DATES and PLACES

*Wed-Thu. May 21-22
San Francisco
(Hotel to be announced)

Sat-Sun. June 21-22
Sacramento (Airport Host Hotel)

Sat-Sun July 19-20
San Diego (Hanalei Hotel)

Sat-Sun. Nov. 15-16
San Jose (Hyatt House)

*SCHEDULED ON WEDNESDAY-THURSDAY FOR THE CONVENIENCE OF THOSE WHO FIND WEEK-END SEMINARS INCONVENIENT.

## [SUBJECT]
## THE LUMBAR SPINE
## AND THE RELATED VISCERA

Tear out this handy coupon NOW
and reserve your place
on the dates and location of your choice.
Enclose your check, and mail to:
L A C C, 920 E. Broadway, Glendale, CA 91205

Name _____ License No. _____

Street address _____

City _____ State _____ Zip _____

Please reserve my place in _____
CITY

On this week-end (or mid-week) dates _____

My check enclosed for $ _____ Signed: _____

*If you require certification to a state other than California, please check here* [ ]

# EDITORIAL COMMENT

## SPECIALIST ?

A recent article referred to the doctor of chiropractic as a "specialist"! As practitioners, teachers, and students of chiropractic we had better periodically ask ourselves who we are.

Specialists we are not upon graduation from a college and being licensed. Generalists we are!

Prior to being a specialist it is necessary, in the context of the evolution of all the professions, to be a generalist first. By extended experience and study in a particular segment of general practice, it may be possible to become a specialist within chiropractic, e.g., roentgenologist, orthopedist, internist, etc.

The claim that a chiropractor is a specialist immediately raises the question of his school of general generic medicine. Thus, the danger of first being required to graduate as an allopathic physician, followed by years of study to qualify as a specialist in chiropractic. Few there would be, after indoctrination in allopathic medicine, who would pursue the specialization of chiropractic with the greater physical effort and more limited number of patients that it is possible to adequately treat in the course of a day.

Let us recognize that chiropractic is a distinct, unique and self-sufficient school of generic medicine and not ancillary to, or a specialization in allopathic medicine. Recognizing that being self-sufficient does not mean being all-inclusive --- a panacea. No branch of generic medicine is that!

The allopathic physician needs the surgeon, the dentist, the podiatrist, and the varied specialists within his broad school of thought. The chiropractic physician requires all such services for some of his patients, also.

The basic thinking and use of the facts of the basic sciences makes chiropractic distinct from allopathic medicine, and not a part thereof, no matter how specialized. If our point of view of the aberrations of health is the same as that of allopathy, and only our methods of treatment are different, we have missed the essence of chiropractic, and the public is the loser.

The desire to be a specialist in musculoskeletal problems by the entire profession would be an abrogation of the public's right to an alternative health care system. It is tempting to forsake the challenge, responsibility, demands, and worries of the care of sick people for the 10 to 4 hours, four or five days per week, of the somatic practitioner. However, the sick and suffering need an alternative to the risks of side-effects of present allopathic drugs.

Chiropractic must continue to offer this alternative!

A. Earl Homewood, D.C.
Guest Editorialist

# THE CHIROGRAM • JOURNAL
OF THE LOS ANGELES COLLEGE OF CHIROPRACTIC

CIRCULATION — 11,000

THE CHIROPRACTIC PHYSICIAN MAY 1975, VOL. 42 NO. 5

*Dedicated to the dissemination of current and research information relative to the field of Chiropractic Therapeutics*

## FEATURE ARTICLES



## REGULAR FEATURES



THE CHIROGRAM is published monthly by the Los Angeles College of Chiropractic, 920 E Broadway, Glendale, California 91205. ADVERTISING DEADLINE: All new display copy must be in our hands by the first of the month preceding publication. Classified ads must be in our hands 6 weeks prior to publication, accompanied by check. Make checks payable to THE CHIROGRAM, 920 E. Broadway, Glendale, CA 91205. Currency mailed at sender's risk. All contracts are subject to approval by the editorial board. The right to reject any advertising is reserved. CHANGE OF ADDRESS: Allow 4 weeks for change of address to become effective. Give both old and new addresses, including zip codes. SUBSCRIPTION: $5 per year. 50 cents for single copy and for back issues when available, payment in advance. THE CHIROGRAM does not accept responsibility for opinions expressed in advertisements or signed articles. 

## CRANIAL NERVE TESTING

by John M. DuBois

The purpose of this article is to consolidate several methods of cranial nerve testing so the doctor will have at his disposal several methods of testing each cranial nerve so that when clues to malfunction are encountered, a more complete and systematic examination may be performed.

The 12 pairs of cranial nerves with their several end organs gather and conduct to the central nervous system much of the information which it receives from the outside world and much of what it receives from the viscera as well. The motor functions are devoted to aiming and adjusting the organs of special senses, vocalizing, chewing, and swallowing food, and the control and reflex adjustment of respiratory and visceral functions.

The physiologic and anatomical implications of disturbed functions of the cranial nerves are very important to clinical diagnosis. In the routine physical examination, most physicians test the components of the cranial nerves in a piecemeal manner as they elicit the history and examine the head.

### Cranial Nerve I (Olfactory Nerve)

Examination for smell is routinely done. It should be carried out, however, when the patient has noted a loss of taste or when other signs and/or symptoms suggest involvement of the frontal fossa.

The nose should be examined first to make certain that neither nostril is obstructed. Each nostril should be tested separately while occluding the other. Test substances such as small vials of coffee, tobacco, cloves, or oils of pine, wintergreen, peppermint or cinnamon should be used. Have the patient close his eyes so that visual identification cannot be made. Irritant substances must be avoided since they stimulate the pain pathways subserved by the fifth cranial nerve.

The test substance is held under the nostril and the patient is instructed to sniff gently and state the odor.

Many normal people have difficulty in recognizing odors, and, in general, little should be made of the patient's inability to identify an odor so long as he is definitely able to perceive it. Total loss of smell (anosmia) on the other hand is a significant abnormality, suggesting a lesion along the pathway of the olfactory nerve.

### Cranial Nerve II (Optic Nerve)

Examination of visual function should be a part of every examination. This should include evaluation of visual acuity, delineation of the visual fields and examination of the retina and optic disc.

The history usually provides a rough idea of the patient's visual acuity, and indeed a reliable history may eliminate the need for specific testing. Generally, however, some estimate of the visual acuity of each eye should be made. Standard charts, such as the Snellen Chart, are available, but most of the time it is adequate to determine whether the patient is able to count fingers, recognize objects or read the small print of the newspaper with each eye separately, with or without glasses.

If visual acuity seems to be impaired, detailed testing may be needed, and referral should be made to an ophthalmologist or to an optometrist.

Evaluation of the visual fields should form a part of every examination. The visual fields are tested for each eye separately. The examination can be carried out in several ways. It is easily done with the patient lying supine. He fixes the eye to be tested on a black spot on the ceiling directly over the examining table. The examiner then brings a finger from outside to inside the field of vision in all quadrants. The patient is instructed to report when he first sees the examiner's finger at the periphery of his sight. The patient must be instructed not to look towards the doctor's hand, but to stare at the spot on the ceiling.

With practice, it is easy to recognize the "normal" visual field and demonstrate rather minor deviations from it. This gross test of the visual fields is generally adequate. If there is a serious cause to suspect a visual field defect which cannot be picked up by this method of testing, referral for examination should be made.

The optic fundi should be evaluated during the general physical examination. Look for abnormalities of the cornea, lens, vitreous fluids, disc, blood vessels and retina. The disc is examined for color (optic atrophy is associated with pallor of the disc), for changes in the optic cup and for clarity of the disc margins.Changes in size, shape, state and tone of the arteries and veins are noted.

The veins are studied particularly for dilations, A-V nicking and presence or absence of pulsations.

The retina is searched for hemorrhages, exudates and scars.

A full-blown case of papilledema is easily recognized, but its early signs are subtle; engorgement of veins, loss of venous pulsations and obliteration of the optic cup. Particular attention should be paid to those items, and in the event of their discovery, a thorough study of the cardio-vascular system should be made.

### Cranial Nerves III, IV and VI (Occulomotor, Trochlear and Abducens)

These nerves subserve movements of the eyelids and eyes, pupillary size and responsiveness. Their function should be studied in every patient.

The eyes should be observed for drooping of the lids (ptosis), unilateral or bilateral, and for strabismus, i.e. a lack of parallelism between the visual axes. The size and shape of the pupils should be noted. Light should be directed into each eye individually, and the

pupillary response should be evaluated in both the stimulated eye and the opposite eye (consensual reflex).

Pupillary accommodation should be measured by having the patient fix his vision first on a distant object, then shift vision to a near object, while the examiner observes the pupillary size. Accommodation is not tested by having the patient's eyes converge.

Eye movements may be tested by having the patient fix his eyes on the examiner's finger or on a small light. He is then instructed to follow the object while it is moved to the extremity of eye movements in upward, outwards and downward directions. The examiner looks for any limitation in conjugate gaze, any independent movement of one eye, or the escape of an eye from the pattern of movement.

The patient should be asked whether he sees a double image while following the object. If he does, he is asked to state in which position the images seem most separated, and their relation to each other. The images are most separated in the primary direction of gaze of the weak or paralyzed muscle. If the examiner is unable to detect a paralysis, he must use other methods to determine which muscles are malfunctioning.

Usually the patient is able to describe which is the true and which is the false image. The false image (which is seen by the paretic eye) can be distinguished by closing the eyes separately. If the patient is unable to perceive which image is false, the use of a red glass over one eye may be helpful: the false image appears most displaced in the direction of primary action of the paralyzed muscle. In practice, if there is diplopia without overt strabismus, the patient probably should be referred to the optometrist or ophthalmologist, since evaluation of these problems is usually difficult, and requires specialized equipment.

While observing eye movements, the examiner looks for any regular rhythmic jerking movements of the eyes. Nystagmus usually has a slow and fast component; only rarely is it arrythmic. The direction of gaze in which movement is most marked and the direction of the slow and fast components are noted. Rhythmic eye movements (nystagmus) must be differentiated from difficulties with fixation; the latter are common in cerebellar disease; the former, in diseases of the labyrinths and vestibular pathways.

In many normal individuals, extreme lateral or vertical gaze provokes a fine rapid jerking movement of the eyes. This movement, which occurs when the viewed object is beyond the effective point of fixation, should not be confused with nystagmus.

Convergence is tested by asking the patient to look at the end of his nose, or to fix his gaze on your finger which is then moved toward the midline of the face.

### Cranial Nerve V (Trigeminal)

The fifth cranial nerve has both sensory and motor components. It has three branches. The ophthalmic branch sends sensory fibers to the cornea, ciliary body, conjunctiva, the nasal cavity and sinuses, the skin of the eyebrows, forehead and nose. The maxillary branch

sends sensory fibers to the skin of the sides of the nose, the lower eyelid and the upper lip. The mandibular branch has both sensory and motor fibers. Its sensory fibers supply the skin of the temporal region, the auricula, the lower lip, the lower face, the mucosa of the anterior two thirds of the tongue, the mandibular gums and teeth. Its motor fibers innervate the muscles of mastication; masseter, temporalis, pterygoideus internus and externus. In practice, sensory abnormalities are noted much more frequently than motor abnormalities, so that on rapid examination only the sensory functions need be tested.

Sensation over the face is usually tested with a pic and cotton. In peripheral lesions of the nerve, sensation may be lost over one or all three of its branches. If the area of sensory loss exceeds the peripheral distribution of the nerve, the nerve's central connections must be involved.

The corneal reflex, one of the most useful reflexes clinically is tested by stroking the cornea lightly with a wisp of cotton, approaching the cornea from outside the patient's visual field, so that no involuntary blink response is obtained. Corneal stimulation usually results in a brisk blink of both eyelids.

The reflex depends on the sensory function of the first branch of the fifth cranial nerve, central connections, and peripheral function of the seventh cranial nerve (facial). Each eye should be tested and the resulting blinks evaluated. The patient should be asked if he perceives the stimulus equally in both eyes. The corneal reflex may be diminished or lost with peripheral lesions involving the first branch of the fifth cranial nerve, with lesions of the central synapses, and with lesions impairing function of the seventh cranial nerve.

From a motor standpoint, the fifth cranial nerve supplies largely those muscles which close the jaw and move it from side to side. Masseter function is tested by having the patient clench his jaws, at which time the bulk of the muscle can be felt on either side.

When a patient with unilateral motor disease of the fifth cranial nerve opens his jaw, the jaw deviates towards the side of weakness. The patient can move his jaw toward the paralyzed side, but weakness is noted when he attempts to move it toward the non-paralyzed side.

Occasionally, wasting of the temporalis muscle may be noted in lower motor neuron disease involving the fifth cranial nerve.

### Cranial Nerve VII (Facial)

In taking the history, you will already have had an opportunity to observe the function of the facial muscles. The face should be observed for any lack of expression or fixity of expression, unusual smoothness of skin or absence of wrinkles, flattening on one or both nasolabial folds, asymmetry at rest or when talking or smiling, or asymmetry of the eye blink.

The motor functions of the nerve should be assayed in every neurological test. The completeness of the examination is dictated by the clinical circumstance.

The patient is asked to close his eyes tightly and keep them closed against resistance, to elevate the eyelids and keep them elevated against resistance, and to show his teeth. Also ask him to blow out his cheeks, purse his lips, and whistle. Movement of the facial musculature, and of the platysma should be noted. The face should also be observed for involuntary movements such as tics, twitches, repetitive contractions, choreoform movements, etc.

The snout reflex is elicited by tapping the lips or perioral region lightly with the fingers or reflex hammer. When the reflex is present the stimulus is followed by a pursing of the lips. The snout reflex is usually prominent with bilateral lesions of the corticobulbar fibers.

The seventh cranial nerve also has sensory functions; transmitting taste sensation from the anterior two-thirds of the tongue, and certain secretory functions, but these are seldom tested on routine examination.

Lesions of the seventh cranial nerve nucleus or the nerve itself usually result in moderate to severe weakness of both the upper and lower facial musculature ipsilaterally. A lesion of the upper motor neurons innervating the facial nucleus,i.e. the cortocobulbar fibers, usually results in mederate to severe weakness of the lower facial musculature contralaterally, with relative staring of the upper facial musculature.

Cranial Nerve VIII (Acoustic)

This nerve is a relatively short trunk consisting of the cochlear and vestibular nerves. Both are sensory, but morphologically and functionally different.

The acoustic nerve function is evaluated by testing hearing in each ear. First, check for patency of each canal before testing begins. Each ear is tested separately.

Hearing may be evaluated by determining the ability to hear the spoken or whispered voice, the rubbing together of fingers placed near the ear, or the tuning fork. Use a tuning fork with a frequency of from 512 to 1024 cycles per second since any lower frequency is too low pitched and only used for testing vibratory sense. The Rinne test is performed by stroking the tuning fork, thus setting it into vibration, and placing the end of it on the mastoid process. Ask the patient if he hears the sound. If he does, he is asked to report when he no longer hears it. The vibrating end of the tuning fork is then placed near the external auditory meatus. The patient is again asked if he hears the tuning fork and when the sound disappears. The point of disappearance with both bone and air conduction can be measured against the examiner's hearing for a rough appraisal of auditory capacity.

Asking the patient to listen for a watch tick is ordinarily not a good test for auditory acuity since many normal individuals have high-tone deafness, which is the frequency tested by the watch tick. The Weber test for the lateralization of sound is more often confusing than helpful, and may needlessly complicate the average neurologic examination. Of course, should a problem be suspected, audiometry should be performed.

Normally, hearing is approximately equal in both ears; normally air conduction is better than bone conduction. Unilateral diminution or loss of hearing suggests disease of the internal ear, the cochlea or the auditory nerve itself.

No tests of the vestibular nerve or labyrinthine function are performed on routine examination. In a normal examination, if no gross hearing loss has been detected while taking the history, specific examination of the cochlear function is often eliminated.

### Cranial Nerves IX and X (Glossopharyngeal and Vagus)

Testing of these nerves is usually concerned largely with sensory and motor function of the palate, pharynx and larynx, although the vagus nerve has functions involving many other parts of the body. The patient is asked to open his mouth, and the position of the palate and the uvula at rest is noted. The patient is asked to say "ah" and the elevation of the palate and the constriction of the pharyngeal musculature during phonation are observed. The posterior wall of the pharynx is then stimulated on the left and right sides by a swab or by the tongue blade, and the resulting contraction of the pharyngeal musculature is observed.

The patient is asked if he perceives the stimulus to the posterior pharyngeal wall. The patient is instructed to swallow, and any difficulties are noted. The patient's speech has already been heard and notation made of any abnormalities or hoarseness.

The presence or absence of the gag reflex has been greatly overrated clinically. While a gag reflex is usually present, many normal people lack it, its absence in these people should not be considered pathological. If the patient is able to perceive the stimulus on the posteriopharyngeal wall and to elevate the palate and constrict the pharyngeal musculature voluntarily, the absence of the gag reflex is usually insignificant.

The palate and pharynx should be elevated particularly for asymmetries, such as drooping of one side of the palate or failure of one side of the pharyngeal wall to constrict. Such asymmetries often indicate peripheral lesions of the glossopharyngeal or vagus nerves.

Bilateral difficulty using these muscles is often seen in bilateral corticobulbar tract disease and myasthenia gravis.

### Cranial Nerve XI (Spinal Accessory)

This purely motor nerve innervates the sternocleidomastoid and trapezius muscles. Its function can be rapidly evaluated by testing the strength of each muscle.

The sternocleidomastoid muscle acts to turn the head away from the side of the muscle; thus disease results in inability to turn the head toward the normally functioning side.

The trapezius muscle is tested by placing your hands on the patient's shoulders towards his ears, against your resistance. This muscle

also tends to adduct the scapulae. A lesion of the spinal accessory nerve results in weakness of these functions.

Cranial Nerve XII (Hypoglossal)

This purely motor nerve innervates the tongue. Its function can be rapidly tested.

The tongue should be observed at rest with the mouth open. Atrophy or fibrillation of the tongue at rest suggests lower motor neuron disease involving the twelfth cranial nerve.

The patient is asked to protrude the tongue. Ordinarily it protrudes in the midline. If there is unilateral weakness, the protruded tongue will deviate toward the side of weakness. Occasionally, assymmetry of the facial musculature or the mandible may be confusing, then deviation of the tongue must be assessed in terms of the midline of the cranium.

Weakness of the tongue without atrophy usually results from upper motor neuron lesions. Thus a lesion of the right cerebral hemisphere often results in weakness of the left half of the tongue, with deviation of the tongue to the left on protrusion.

## STATE DISABILITY BENEFITS IN WORKMEN'S COMPENSATION CASES

by

R. K. Dillman, D. C., N. D., LL. B.

The industrially injured patient often has his Temporary Disability benefits terminated at a time when he may still be disabled because the treating doctor to whom he was sent by the employer or insurance carrier reports that he can return to work, or the employer or insurance carrier contests the Workmen's Compensation claim. The effect is that his weekly Temporary Disability check is no longer forthcoming, at a time when he may be most in need of it.

PAYMENT OF STATE DISABILITY WHERE PATIENT HAS INDUSTRIAL INJURY

Under the California laws in the above situation, if the injured worker is still disabled he can file for Unemployment Compensation Disability Benefits (UCD), more commonly referred to as State Disability, which is primarily intended to be paid to those who are injured or otherwise disabled as the result of non-occupational injury or sickness.

STATE DISABILITY WILL CHECK WITH COMPENSATION CARRIER

When filing for State Disability benefits in Industrial cases, State Disability will first check with the Insurance Company that covers the employer with Workmen's Compensation coverage to verify that a Workmen's Compensation claim was in fact filed, and

the Insurance Company will be asked to verify whether they have stopped making payments, are not going to make payments or are contesting the claim made by the Compensation carrier. Then State Disability will require a report from a doctor, verifying that the applicant is disabled and, if the injured worker is otherwise qualified, State Disability will start making payments.

## LIEN FILED BY STATE DISABILITY

Since State Disability benefits are primarily designated for payment to those injured or otherwise disabled from non-industrial conditions, they will be paid to the industrially injured who qualify only on a lien basis.

This means that if the injured worker makes a recovery in his Workmen's Compensation action for temporary disability, and if that recovery of Temporary Disability covers the same period as that paid by State Disability, then State Disability will recover the amount paid out.

The lien falls if there is no recovery for Temporary Disability in the Workmen's Compensation action and the lien is not applicable as against any recovery the injured worker may receive for Permanent Disability.

## CLAIM MUST BE FILED WITH WORKMEN'S COMPENSATION APPEALS BOARD FOR LIEN TO BE EFFECTIVE

When an industrially injured worker makes a claim for State Disability benefits, the office where he files his claim will require him to file an application for Workmen's Compensation benefits with the Workmen's Compensation Appeals Board. The reason for this is so that the State Disability Lien can be filed in that action as it is obvious that if the Compensation carrier stopped paying Temporary Disability thay did so because they felt they had a valid reason, and would not voluntarily reimburse State Disability for the amount paid by them, without an order to that effect made by the Workmen's Compensation Appeals Board.

## WHEN STATE DISABILITY BENEFIT IS HIGHER THAN WORKMEN'S COMPENSATION BENEFITS

An injured worker collecting Temporary Disability from a Workmen's Compensation carrier may also file a State Disability claim if the State Disability benefit is higher than the Workmen's Compensation benefit, as he is entitled to the difference from State Disability between the Temporary Disability rate under Workmen's Compensation and that to which he is entitled under State Disability. Under Unemployment Insurance Code Section 2629 and 2804, the Doctor certifying a patient for State Disability benefits may be a licensed Chiropractor, Physician and Surgeon, Osteopath, Podiatrist, Optometrist or Dentist.

## CLAIM FORMS

Those applying for State Disability Benefits may obtain claim forms from the State Employment Development Department. A phone call to this office requesting a form will bring one by return mail. Almost all doctors and hospitals usually have the forms available for their patients.

# THE TREATMENTS OF MIGRAINE
## Part 4

by G. J. Petersen, Ph. D.

*This series neither promotes, nor invalidates any school of therapy, but rather seeks to bring to the practicing chiropractic physician the latest information from all disciplines, thus enabling him to more thoroughly understand and evaluate the patient presenting himself for treatment, and to understand and be able to discuss other modes of treatment the patient may be, or may have been receiving. Ed.*

The treatment of migraine consists of two parts. First, an effort must be made to prevent the coming of attacks, or to lengthen the intervals between them, or to make them milder. Second, when an attack starts, an effort must be made to abort it or make it shorter or less severe.

### The prevention of attacks

In trying to stop attacks from coming, the thing to try to accomplish is a lessening of the sensitiveness and irritability of the brain. Then the trigger will be so set that the usually harmful stimuli will be unable to trip it.

Theoretically, one should be able to quiet the brain with sedative drugs, but actually, physicians who use drugs have never found one that could offer much help. To obtain results, one must see to it that the brain is rested, as by a good vacation or a better regimen in office and home, and/or a change in life style.

Many years ago a young patient, who, because of over-work in a very trying job, was getting 3 or 4 bad headaches a week. For a year some of the ablest physicians in the city had given many sedatives and had even operated, but without the slightest lessening of the number or severity of the spells. Then the patient's father took the patient on a two months vacation, and with this, the patient became well.

Many a migraine patient could be cured only by a legacy which would supply them with a good servant, or set them free from an unpleasant job or an unhappy marriage.

The sad thing is that so often the patient, like a clerk working hard in a store to support several children, cannot ease up on the strain. Or a frail person with a trying job in a store or factory, and with no relatives to fall back on, and who has to keep going. Then there may be little that the doctor can do to help. Fortunately, however, even an overworked sales person or factory worker can help himself by refusing to fret, stew and brood. They can take thought to get more real rest on weekends, and if they are late getting to bed, they can retire earlier.

The mother with children can sometimes rest on her bed in the mornings, and she can get a lifesaving nap in the afternoons. For an hour or two, her mother, sister, or a friend next door may be willing to watch the children. Even such short rests can be of great help.

Many a person would be well today if they had spent a little on a servant, instead of all the money spent on doctors.

In many a case, a migraine victim's spouse could easily cure them and save themselves doctor's bills. They could do this simply by showing the spouse more kindness, consideration and affection, or by giving up some habit such as gambling, drinking, smoking or picking their teeth at the table, which continually upsets the partner. A great producer of migraine in a marriage is nagging by one partner.

A minister's wife stated that her husband could easily cure her migraine just by starting work on his sermons in the early part of each week. Usually he put it off until Saturday, by which time she was "fit to be tied". He adored her, and he gladly spent all he could make on therapy for her, but the one thing she needed most he couldn't bring himself to do. Then again, she might have cured herself had she been able to have adjusted to his preferred schedule of work, and stop concerning herself with that which was really no concern of hers.

Many a patient could cure their migraine by deciding quickly and once and for all, what they are going to do about an unhappy marriage. They ought either to get a divorce or else stop thinking about it. If they are never going to be tough enough to get it, the spouse should settle down and start making the marriage happier and more satisfying. Here, a competent licensed marriage counselor might be helpful. All migrainous marriage partners should try hard to do things without getting tense, and the patient should watch out and, if possible, drop a job the minute they see they are beginning to wilt. Some public-spirited persons could cure themselves by retiring from a number of chairmanships of committees. Others with insomnia could get much needed rest and much better health by taking a short walk and exercise every night for a while before retiring.

Often a patient gets better when a doctor explains to her what her disease is, and thereby rids herself of her great fear of the attacks. Once the patient knows that the condition is not due to a brain tumor or any disease in the abdomen; that they will never injure them in any way, and that some day they will quit, they are likely to cheer up and feel like a new person. Then they will take the milder spells in their stride.

**What can be accomplished by remodeling a life.** To show what can be accomplished when a patient learns to live more sensibly, the doctor may need only to quote extracts from a holiday letter which came from a patient. An able person, who just six months ago, was a jittery mess of nerves, this patient was desperate, with one severe headache after another. The doctor discussed the principal sources of fatigue and dissatisfaction, and what might be done about them. Now the patient writes, "Today I am well. I am well because I have rearranged my life. Now I can go to parties, I can play in a golf tournament and I can enjoy life. Why? Because now I take care to store up my energies for special occasions. I have learned how, for a short time every day to turn off my mind like an electric light so as to rest and get a nap. My decisions are now made quickly and not mulled over again and again until I am worn out. I have largely retired from public affairs, appeasing my conscience with the vow that

when my children are grown and on their own I will dedicate to charities and civic projects twice the time I used to spend on them." Would that more headache sufferers do this sort of thing.

**Examinations are rarely helpful.** Many migrainous patients waste hundreds or perhaps thousands of dollars getting repeated examinations, always hoping that a localized "cause of their trouble" will be found - something that perhaps can be cut out. Most of us know so little about migraine, yet we hope that with bigger and better examinations we can eventually find a removable cause. But we won't, because it is hidden up in the brain. Even in those rare cases in which an examination does reveal something abnormal, like gallstones, an operation seldom stops the coming of the headaches; it cannot cure the patient because the stones have nothing to do with the migraine. At most, an operation can only wipe out one of the triggers by which the headaches are started.

Another reason why it seldom pays to examine migrainous persons from head to foot is that, as a group, they are remarkably immune to serious disease. They may be often tired and nervous and ailing, but only rarely do they get, before they are old, anything "organically wrong" such as high blood pressure, cancer, or serious disease of the heart or kidneys.

On general principles it is all right for the migrainous to go for a physical examination once a year, but they should never go with the idea that the overhauling will point the way to a cure of the headaches. The cure is not to be found along that road. No, when a migrainous patient asks for help, a good approach is to spend an hour talking over with them their life problems; to learn what are their particular psychic sins, and to see if there is anything the spouse can do to lessen the strain on the patient, before becoming involved in a therapeutic regime.

**Eyes, ears, nose and throat, and teeth.** Doctors like to have a patient's eyes checked carefully, particularly for evidence of imbalance of the oculomotor muscles. In the cases of many persons the muscles on one side of one eye have constantly to be pulling hard in order to avoid a squint, and such strain will sometimes serve as a trigger for the headaches. In these cases prisms ground into the glasses may correct the difficulty. The sinuses and the teeth should, of course, be checked even though disease in them rarely serves as a trigger.

**Uselessness of operating.** Through the years doctors have seen thousands of migrainous patients who in the hope of getting well, had cheerfully parted with teeth, tonsils, appendix, gallbladder and uterus, but very few who were rewarded in the slightest for these sacrifices. If these patients had taken all the funds spent for surgeons and hospitals and had spent them instead on vacations or help in the house, they might have been much better off. At least they would have had some pleasure for their money.

**Induction of an artificial menopause.** Because writers of books cling to the old and now disproven idea that the menopause regularly brings relief to the migrainous, many women welcome the suggestion that they have a menopause brought on ahead of time by re-

moval of their ovaries or irradiation of them with x-rays. Unfortunately, it is a poor gamble; so poor that most doctors never let their patients take it. In a series of cases in which the patient was so treated, doctors have found that only one in seven had been helped, while one of four had been made decidedly worse. Some, after loss of their ovaries, had become depressed; others, five years later, were still suffering from hot flushes, and many were unhappy because they had lost their responsiveness to the husband's affection. Even when a woman has a few fibroid tumors of the uterus, it might be better to keep them; they are usually harmless. Their removal will have no effect on the headaches.

**Treatment with glandular products.** Many physicians give glandular products but some have had no luck with them. Estrogens or ovarian extracts should probably be avoided because we know that large amounts in the blood, as at menstrual times, can bring headaches.

**Diet.** When headaches come infrequently it may help to keep a record of what was done or what was eaten shortly before an attack started. Then it may be found that the eating of some food such as chocolate commonly preceded a headache. If a patient is having three or four bad sick headaches a week they should go for a few days on what is called an elimination diet. During this time the diet should consist of oatmeal with a little butter for breakfast, and lamb, rice, carrots, butter and sugar and fruit for luncheon and dinner. If, on this, the patient loses their headaches, they should immediately begin testing other foods until they find which cause trouble and which do not.

**Desensitization to histamine.** Dr. Bayard Horton has found that in some cases the patient stops having headaches for some time after being desensitized to histamine. During the course of a month or two the patient is given daily injections of very small and gradually increasing amounts of histamine. One trouble with judging the value of this treatment is that when the patient goes to some distant medical center to get the injections it is hard to say how much of the relief obtained was due to the medicine and how much to rest from work and extra mental strain.

**One must not expect a cure.** Because migraine is so intimately built into a patient's whole body, mind and spirit, one cannot hope to work a permanent cure with any drug or regimen; one can only hope to lessen the number of attacks, or to make them milder, and to tide the patient over until the day when, perhaps, they will disappear of themselves.

There are several forms of medicine:

A. Chiropractic
B. Osteopathic
C. Naturopathic
D. Homeopathic
E. Allopathic

**On stopping a headache when it starts.** The first thing to remember when trying to stop a "sick headache" is that the quicker one institutes therapy the morelikely one is to get a result. After a headache has been under way for an hour or two it may be impossible to stop because by then, the wall of the dilated and throbbing artery will have become so swollen that it cannot contract immediately and well.

The second very important point to remember in treating migrain is that once a person is a bit nauseated it is generally useless to give him medication by mouth; his stomach is temporarily out of order and will not absorb it. At some times any medication, to be effectual, must be administered by other than the oral route.

As every suffering patient knows, a bad migrainous headache is not relieved at all by aspirin or any ordinary headache tablet. In milder spells the pain may be relieved by aspirin taken quickly, or by a mixture of aspirin, phenacetin and codeine, perhaps with some caffein. This, of course, is prescriptive. Codeine is derived from opium but has so little habit forming tendency that many doctors do not fear giving it to patients. In thirty years of kept records there was only one known case of a patient with a terrible migraine who began taking too much of it, and he stopped when the doctors asked him to. Codeine is not a strong pain reliever; it constipates; and some patients are allergic to it.

In some cases early cervical and dorsal manipulation may abort a migraine attack, and in other cases this will fail.

When aspirin and codeine fail, medical physicians have no other drugs which they can safely prescribe for the relief of pain. The powerful painkillers, such as morphine, dilaudid, demerol and methadone are so likely to produce addiction that no migrainous person should ever start using them. It is a terrible thing to become an addict.

Some doctors give salicylates, but there is some doubt if they work any better than does their close relative aspirin. Phenacetin, acetanilid and aminopyrine have about the same pain-relieving power as aspirin. Aminopyrine should be used with caution because there are a few persons who are highly sensitive to it. Practically all of the patented headache remedies on the market are mixtures of aspirin and phenacetin. A few patients get help from nicotinic acid, atropine, benzedrine or caffein.

The chiropractic physician can many times stop a migrainous headache by manipulation, and by the use of cold packs. The cold tends to reduce the arteries. Other persons can stop an attack by breathing either pure oxygen, or a mixture of 90 percent oxygen and 10 percent carbon dioxide. The difficulty with this is that it is too troublesome to go to a physician or to a hospital anesthetist to try out the inhalation. In those few cases in which a sufferer finds that the inhalation works beautifully, he or she can buy a small tank of the gas, a reducing valve, and a BLB mask to fit over the mouth and nose.

Of all the dozens of drugs that have been recommended for the-

stopping of attacks of migraine the only reliable one, which will give relief in 8 out of 10 cases is ergotamine. It tends to reduce the dilated arteries, and whenever this is accomplished, the headache goes. In the United States, ergotamine is commonly sold under the trade names of Gynergen and Cafergot. Gynergen is administered hypodermically or intramuscularly in doses or 0.5 or 1.0 cc. of the solution by the medical physician.

Cafergot is a tablet containing ergotamine and caffein. Two are usually prescribed to be taken the minute an attack begins. One tablet is seldom enough and sometimes the patient has to take an extra one each half-hour until relief is obtained. No more than 6 tablets should be taken in any one attack, and no more than 10 in any one week. Some persons with very bad attacks take 3 or 4 tablets to begin with, and then stop. The drug should never be taken between attacks as a preventative of headaches. Such use is not logical and it might well be dangerous.

Because there are a few persons who are uncomfortable after taking ergotamine, the manufacturers have developed a milder-acting drug called dihydroergotamine, or for short, DHE45. It is hyperdermatically administered. A disadvantage is that in many cases, it is not strong enough to stop the headache.

The migrainous patient often takes Gynergen or Cafergot too late because they waited to see if a headache that started mildly was going to turn into a bad one. They hoped it was going to be an ordinary mild fatigue or nervous or mental strain headache, something that an aspirin tablet would relieve. An hour later, when the throbbing pain and the awful nausea arrived, and they knew what they were in for, it was too late to take anything by mouth, and perhaps it was even a bit late for an injection.

Years ago a young patient discovered how one could quickly tell a mild from a rip-roaring headache. While sitting, the patient would bend over so as to bring the head down between the knees; then, if the head began to throb, the patient knew that he must quickly get therapy before becoming prostrated by the pain and nausea.

When the pain gets out of control and is associated with prolonged vomiting, the medical physician may give a rectal suppository containing 3 grains of Nembutal. This tends to quiet the vomiting center in the brain and eventually to bring sleep. Always, with a bad headache and with any form of treatment, it helps if, for a time, the patient can lie down in a darkened room.

SUMMARY

Migraine is a hereditary disease which goes with a highly sensitive type of nervous system. The headache is due to a "storm" in the brain which widens the lumen of an artery in the head and allows excessive blood to go pounding through. The storm in the abdomen is secondary to the one in the brain, hence there is seldom reason for searching through the body for a "cause", and rarely is there reason for surgery.

The best way in which to help a migrainous patient is to prescribe rest and to teach him to avoid strains and annoyances and painful conflicts.

Ergotamine, if given quickly enough and in sufficient dosage, will stop a headache in about 80 percent of the cases. Chiropractic physicians have successfully treated patients with manipulation and physical therapy. Unfortunately, it is a treatment for individual headaches, and not for the disease as a whole.

Because the disease is closely built into the person's nervous system there is no "cure", but most patients if they will only learn to live calmly and sensibly will largely outgrow the headaches, perhaps by the time they are thirty. Any person who after forty is still suffering much from migraine is probably earning it in one way or another, and even they may be able to reform and get well.

**References**

Alvarez, Walter, M. D., Mayo Foundation
Cooke, Harry H., M. D., Ph. D., F. A. C. S.
Horton, Bayard, M. D.

# In Memoriam

Dr. Albert Ecklund
DeMotte, Indiania

†

Dr. Alfred H. Brown
San Diego, California

†

Dr. Max L. Howard
Salyersville, Kentucky

†

Dr. George Cubberly
Monrovia, California

†

Dr. John E. LaValley
Milwaukee, Wisconsin

†

Dr. G. H. Soltys
Glendale, California

†

Dr. George W. Martens
Bloomington, California

†

Dr. C. I. Burnett
Hollywood, California

†

Dr, Melvin A. Peterson
Denver, Colorado

†

Dr. William H. Burns
Sonora, California

†

Dr. Johanna van Otterloo
Holland, Michigan

# X-RAY CLINI-QUIZ

by

Philip C. Runsten, D. C.
Certified Roentgenologist

1. Which of the following is not one of the properties of X-ray?

A. Travel in straight lines
B. Cause certain substances to flouresce.
C. Cause electrons to move at high speed.
D. Effect photographic film.

2. Filters are used to reduce

A. Exposure time
B. Amount of radiation to the patient.
C. Processing time
D. None of the above.

3. If we wish to double the density of a given film we can

A. Double the KVP factor
B. Double the distance factor
C. Double the MA factor
D Half the distance factor

4. To alter the density of a film but not change its contrast scale we may elect to change

A. Kilovoltage
B. M.A.
C. Change filtration
D. Go from small to large focal spot

5. To produce x-rays we need a source of electrons. Which of the following components fill that need?

A. Rotating anode
B. Filament
C. Focusing cup
D. Tungsten target.

**(ANSWERS ON PAGE 28)**

## GRADES OF ESSENTIAL HYPERTENSION

| CLASSIFICATION: EARLY OR MILD BENIGN | |
|---|---|
| AGE | 30 - 65 |
| SYMPTOMS | None to slight. Health generally good. |
| BLOOD PRESSURE | 150 - 200 / 100 - 120. May be normal at rest. |
| RETINAL FINDINGS | Mild or minimal arterial narrowing. |
| HEART | Slight changes, or none may be apparent. |
| URINALYSIS | Normal findings |
| RENAL | Normal |
| BRAIN | Normal |

| CLASSIFICATION: MODERATE BENIGN | |
|---|---|
| AGE | 21 - 59 |
| SYMPTOMS | Slight: Early morning headaches, dizziness; otherwise OK. |
| BLOOD PRESSURE | 200 - 270 / 100 - 130 |
| RETINAL FINDINGS | Arteriolar sclerosis. AC compression. No retinitis. |
| HEART | Slightly enlarged. Good function. |
| URINALYSIS | Mild albuminuria and casts. |
| RENAL | Slightly decreased urinary clearance; 30 - 40 cc. |
| BRAIN | Normal |

| CLASSIFICATION: LATE OR SEVERE BENIGN | |
|---|---|
| AGE | 22 - 57 |
| SYMPTOMS | Headache, nervousness, dizziness, fatigue, dyspnea, nocturia. |
| BLOOD PRESSURE | Systolic over 170; Diastolic over 110. |
| RETINAL FINDINGS | Arteriolar sclerosis and AV compression plus retinitis with edema, white spots, cotton-wool patches, hemorrhages. |
| HEART | Enlarged with diminished reserve. |
| URINALYSIS | Albumin and casts; often Red Blood Cells. |
| RENAL | Decreased urea clearance; 20 - 30 cc. |
| BRAIN | Cerebral disturbances or frequent accidents (may herald CVA). |

| CLASSIFICATION: MALIGNANT SYNDROME | |
|---|---|
| AGE | 8 - 64 |
| SYMPTOMS | Headaches, disturbed vision, muscle pains, weakness and dyspnea. |
| RETINAL FINDINGS | All of the above plus papilledema |
| HEART | Enlarged. Actual or impending failure. |
| URINALYSIS | Albumin, casts and Red Blood Cells. |
| RENAL | Usually low urea clearance; 7 - 20 cc. |
| BRAIN | Behavioral disturbances present. |

## LOS ANGELES COLLEGE OF CHIROPRACTIC GRADUATE SCHOOL

**Contact: F. Maynard Lipe, D.C., Dean**
**920 E. Broadway, Glendale, CA 91205**

X-RAY

Following ACA American College of Chiropractic Roentgenology Syllabus. Minimum 300 class hours with approximately 4500+ clinical practice course. Open to licentiates only.

ORTHOPEDICS

300 hours, following syllabus approved by the American Board of Chiropractic Orthopedists. Prepares for certification examination by the Board. New classes begin in March. Closed after third session.

DIAGNOSIS AND INTERNAL DISORDERS

330+ hours leading to Certification Program. Open.

DIVERSIFIED TECHNIC AND REFLEX COURSE

Manipulative methods for all joints, all systems. Dr. Roy Logan conducts lecture, demonstration and workshop. Personal attention to each participant.

---

**GLENDALE, CALIFORNIA — LACC CAMPUS**

Contact:

For Diversified Technique, Dr. Anita Santangelo, (213) 474-1885
For Orthopedics, Dr. Anna Reeves, (213) 249-3575
For X-Ray, Dr. Bryant Low, (213) 245-2061
For Diagnosis and Internists, Dr. Katherine Laster, (213) 846-6069

**1st Weekend- Diversified Technic** **3rd Weekend- X-Ray**
**2nd Weekend- Orthopedics** **4th Weekend- Internists**

**SACRAMENTO, CALIFORNIA — WOODLAKE INN**

Contact: Dr. Patricia Abbott, (415) 934-4016

**1st Weekend- Orthopedics** **4th Weekend- Diversified Technic**

**SOUTH SAN FRANCISCO, CALIFORNIA — ROYAL INN (AIRPORT)**

Contact: Dr. Patricia Abbott, (415) 934-4016

**2nd Weekend- Diagnosis and Internist**

**BOISE, IDAHO**

Contact: Dr. Tom Allegrezzo, (208) 342-1400

**1st Weekend- X-Ray**

All classes meet Saturday 2 to 9 PM and Sunday 9 AM to 4 PM

ANSWERS TO
CLINI-QUIZ

1. C
2. B
3. C
4. B
5. B

# classified advertising

RATES: Name, address, box number etc. to be counted as part of the advertisement.

BOX NUMBERS: 50 cents per insertion additional to cover handling and postage costs to forward replies.

COSTS: 25 cents per word. Minimum $2.50 for ads under 10 words. All standard type.

ALL ADS PAYABLE IN ADVANCE to THE CHIROGRAM at 920 East Broadway, Glendale CA 91205. Check or Money Order must accompany request for ad. No ad will be published without payment. For your safety, send only check or money order. Do not send cash!

DEADLINE: 6 weeks prior to publication date.

WE RESERVE the right to correct spelling and punctuation, or to refuse any advertisement.

THE CHIROGRAM nor the publisher accept responsibility as to advertiser's claims, goods or products. The presence of an ad in the Chirogram does not imply endorsement by either this publication nor by the publisher.

DO NOT CALL the Chirogram office relative to box numbers in ads. No information will be given.

## OFFICES FOR SALE, RENT OR LEASE

PROFESSIONAL BUILDING for rent; Full spine x-ray; $280 month. Covina. (714) 599-7408.

$75,000 YEAR PRACTICE. Chiropractic practice & property including beautiful 2650 sq. ft. Separate office. Doctor retiring. Will stay to convert income. 29% down and Doctor will finance balance. Ontario, California area. Contact Dick Roberts U. B. I. 1615 No. Indian Hill, Pomona, CA 91767. (714) 624-1684.

OFFICE FOR SALE for price of equipment. Walnut desk, matching chairs, Blanchard adjusting table, 2 sine wave 2 large Dallons and one Fisher Sound. 2 treatment tables, cold quartz, lamps, one Aloe Gyn Table. Linens, Misc. Best offer takes all. Phone afternoons and evenings. (213) DU 9-4553.

FOR LEASE: Modern chiropractic office fully equipped with X-ray. Exc. Temple City location. Must be licensed. Owner will negotiate. Call agent, (213) 283-7010.

FOR SALE: Established practice in Southern California. Retiring after 24 years in same location. Well equipped office, stable practice. Excellent opportunity for right doctor. Within an hour's drive from beaches, mountains, desert and Los Angeles. Call Monday thru' Friday (714) 684-1551.

## OFFICES FOR SALE, RENT OR LEASE

PROFESSIONAL BUILDING for sale: Ideal 1200 sq. ft. ground floor, 1 story building for medical - osteopathic - dental podiatric - optometric or chiropractic practice. Owner will finance 85% for 10 years. Drive by 11521 Burbank Blvd., N. Hollywood and call (213) 877-1561 for appointment.

SELL WESTWOOD OFFICE: established 1949. 1429 Westwood Blvd., Los Angeles (213) 479-3538.

## EQUIPMENT WANTED

WANTED: McManis Table, hydraulic foot lift type. Paul Sunshine, D. C. 64 Clark Ave., Yuba City, California (916) 673-2874.

## EQUIPMENT FOR SALE

MEDITRON electronic stethoscope, new. $70. Call L. Cubberly, 213-358-8538.

ORTHION Multi-Therapy Tables. New or Used. Purchase or Lease. Vern Toney - (213) 249-4784.

NU MULTI THERAPY TABLE of elegence. Latest design features developed after years of engineering and research. Extremely versatile. Traction on cervical pelvic or ankle, controlled separately or simultaneously with counter traction either alternating or sustained. Is controllable from 0 to 200 pounds. With or without traction. Nunes Therapy Engineering and Equipment, 1123 Palm St., San Jose, California 95110.

USED X-RAYS and Physical Therapy equipment at prices you will like. Will also buy your equipment. Box 1103, Burbank, CA 91507 or Telephone (213) 769-3419.

NEW AND USED X-RAY equipment and supplies. Complete service. One call does it all. PACIFIC X-RAY COMPANY. 711 W. 16th St., Long Beach, Calif. (213) 437-0494.

100-100 X-RAY, available on easy lease terms, installed in your office. R. J. Lindquist Co., 2419 W. 9th St. Los Angeles, California.

SINCE MR. WEST'S PASSING, the West "Thermapads" are sold and repaired by the Apex Medical Equipment Company, 4329 Dalton, Los Angeles, California. Telephone (213) 849-4486.

PULSATHERM: High energy surging short wave. Lease or purchase. For demonstration contact: R. J. Lindquist Co., Manufacturers, 2419 W. 9th St., Los Angeles, California 90006

## OPPORTUNITIES

ASSOCIATE: OPPORTUNITY to join a busy, well equipped office in San Bernardino area without investing. Must be congenial and reliable with references. if you are interested please call (714) 875-5403, or send resume of qualifications to: 209 N. Riverside Ave., Rialto, CA 92376.

## OPPORTUNITIES

**MY OFFICE is corner located in the LA area. It has been recently redecorated, and is well equipped. Good neighborhood. Here is an excellent opportunity for someone to share time and space. You must be congenial and reliable. I prefer an older doctor, but will accept a new graduate with suitable recommendations. You must be licensed in California. If you are interested, please telephone (213) 465-9558.**

RETIRED CHIROPRACTOR available during vacations or absences from your office. Varied experience. Anywhere in California. Dr. Lucille Most, 24 Alexander Ave., Daly City, CA 94014. (415) 584-7725.

LOVING STARTS with self-fulfillment so ... come fill up at Breakthru Group Therapy Center, 1090 So. La Brea, Los Angeles, CA 90019. 937-4211. Be our guest Mondays 7:30 - 11:00 PM.

WANTED to take over your office or an associate position. 50 year old D. C. (213) 941-8630.

## OPPORTUNITIES

CALIFORNIA LICENSED D. C. wants permanent associate position. Guarantee plus commission. (714) 543-2272.

CALIFORNIA LICENSED D. C. available anywhere in California for vacation or sickness replacements. Diversified technic and Goodheart. Board-qualified roentgenologist. Dr. D. Schmidtke, Los Angeles (213) 756-9129

CHIROGRAM ADS

GET RESULTS!

# Use this for your Classified Ad.

# ...write here

what you want to say. 25 cents per word. Telephone or street numbers count as words. Send check or money order to the Chirogram, 920 E. Broadway, Glendale, CA 91205. No ad accepted without payment in advance. For your protection, do not send cash.

# We're up to something, doctor!

You've often heard the warning "Beware of any product that claims it has a secret ingredient".

Well, we have a confession to make. Everyone of our products has dozens of "secret ingredients". You don't have to beware of them, but you ought to be concerned with them. Our "secret ingredients" are here to make our products work and work better; and every product we make has some.

*Our chemists, technicians, laboratories, control systems, and specialized procedures are ingredients of every VM product.*

*But, we do tricky things with the disintegration of some products.*

*We blend materials in funny ways (like on a bed of dry ice @ -90°C.)*

*We carefully run powders through a dozen screens, to separate sizes of granules and then throw it all back in one blender.*

*We even make tablets with split personalities.*

Those are the secret ingredients you don't have to beware of, doctor. They're there for your patient's well-being, and we're going to be telling you about them each month; and about the product they're in, why they're there, and what they do for you!

**We're thinking about tomorrow's health, today!**

VITAMINERALS INC.
GLENDALE, CALIFORNIA 91201

**Distributor listing**

NORTHERN CALIFORNIA

**DONALD KLOCK**
**P. O. Box 388, Los Altos**
**(425) 948-5469**

**STAN ADAIR**
**5425 Rambler Way, Sacramento**
**(916) 322-5436**

SOUTHERN CALIFORNIA

**ROY MILLAR - PAUL BENES**
**ED GALLAGHER**
1815 Flower St., Glendale
(213) 245-1164

JACK SPECK
9953 El Nopal, Box DD
Santee, Cal 92071
(714) 448-7888

YOUR GIFT TO LOS ANGELES COLLEGE OF CHIROPRACTIC IS TAX DEDUCTIBLE

**LOS ANGELES COLLEGE OF CHIROPRACTIC**

920 East Broadway, Glendale, California 91205

THE CHIROGRAM
920 E. Broadway
Glendale, CA 91205
Return Address Requested

Non-Profit Org.
U. S. POSTAGE
PAID
Permit No. 1212
Glendale, Calif.